

19980224-06201

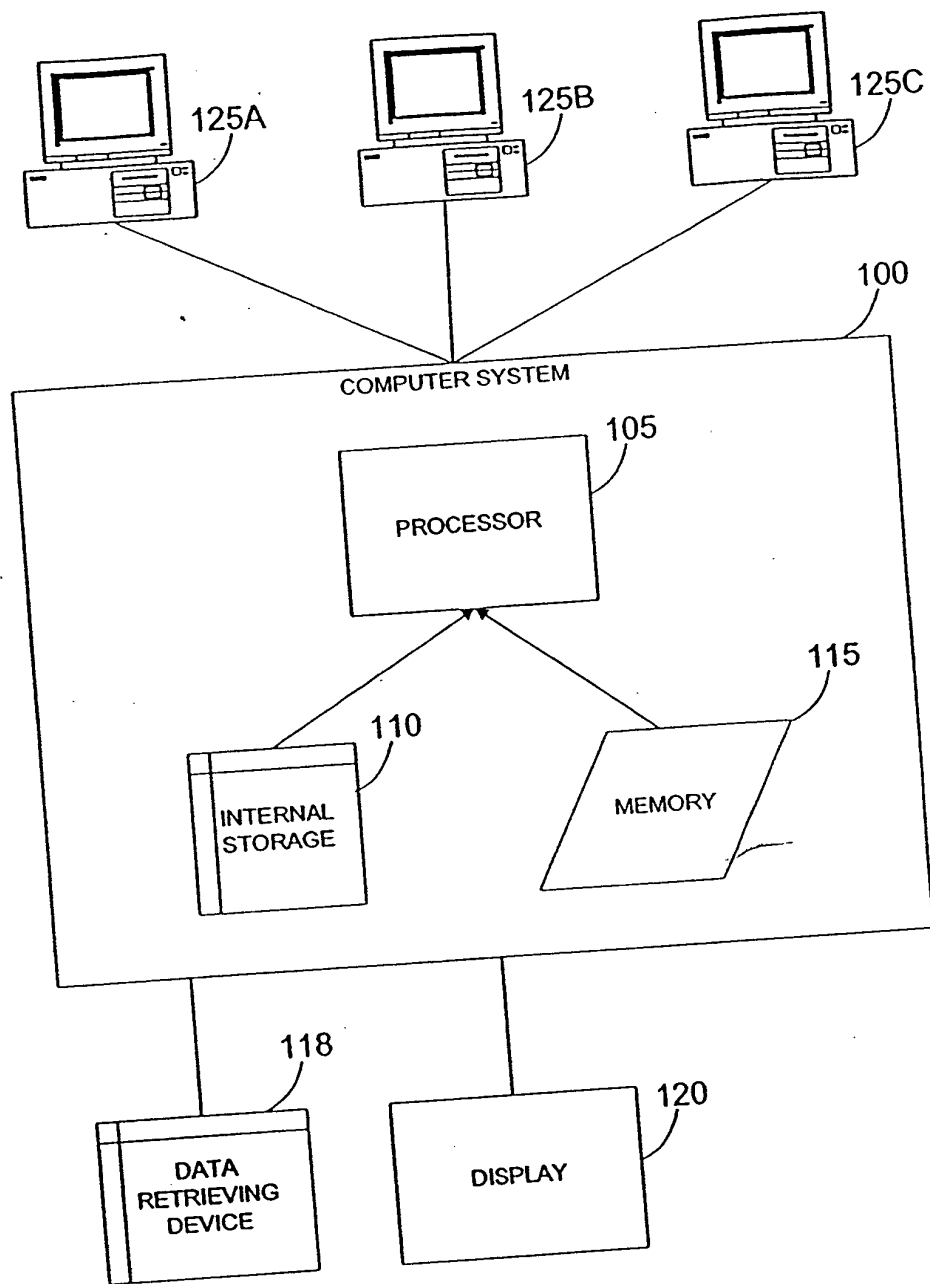


FIGURE 1

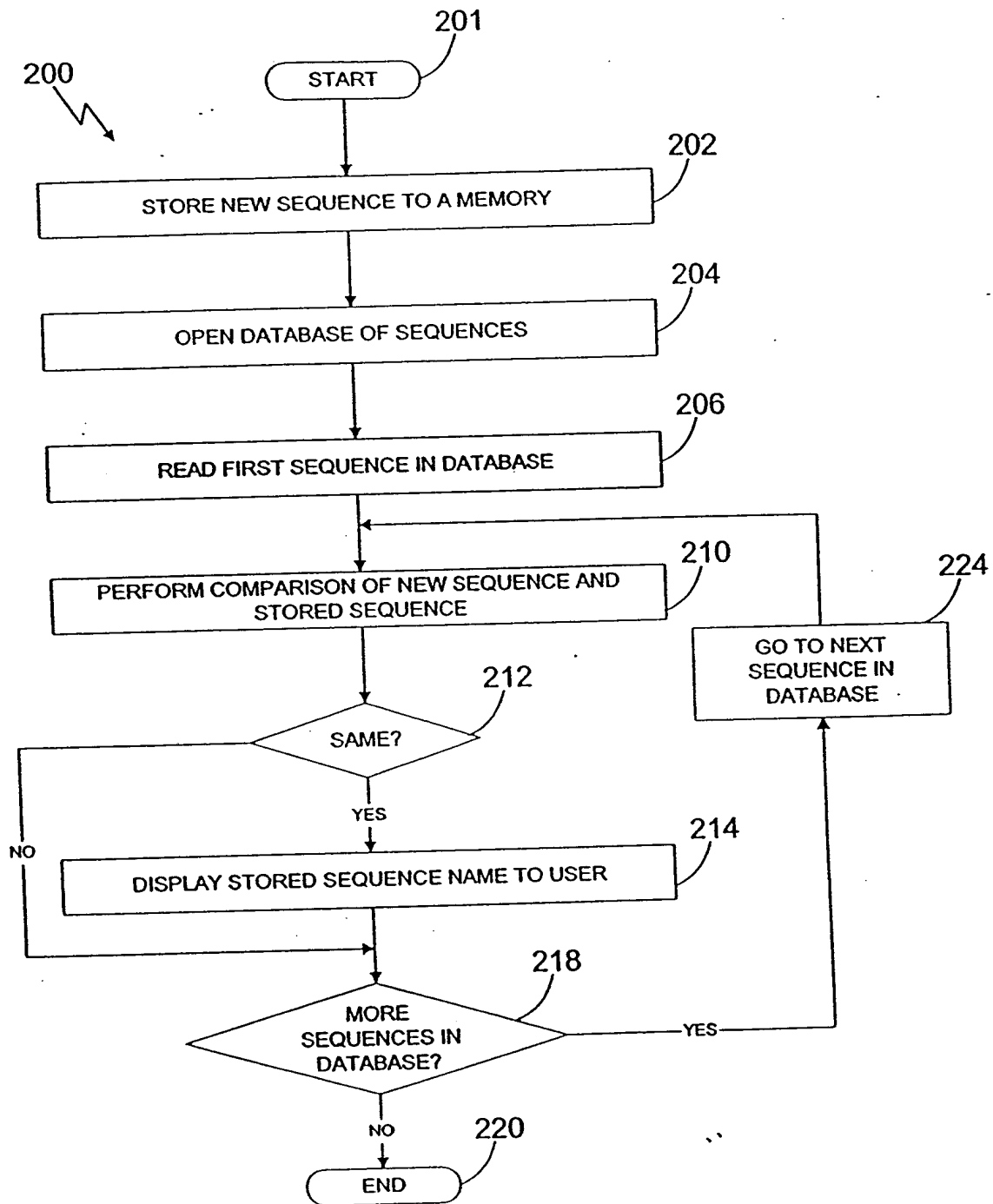


FIGURE 2

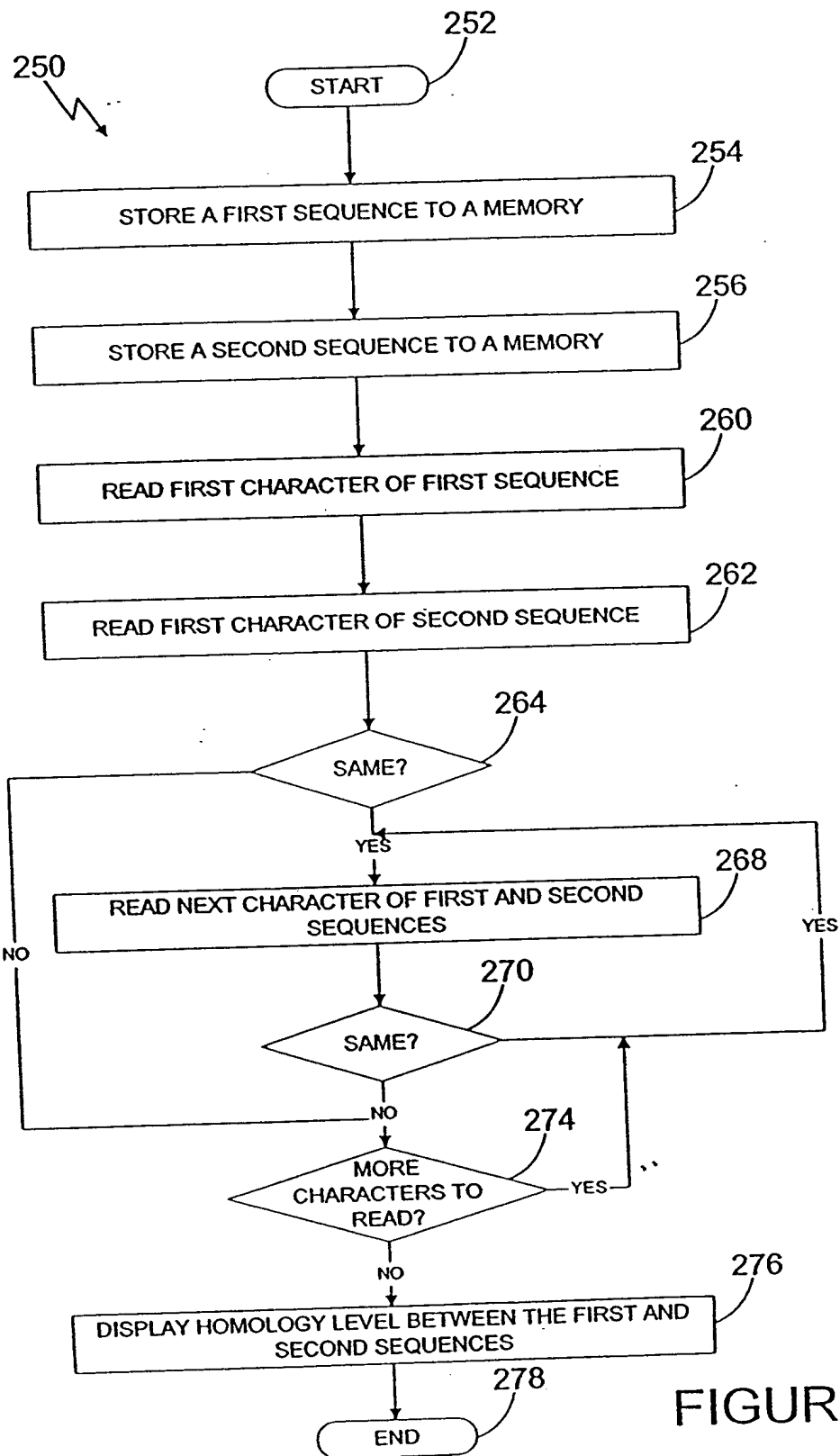


FIGURE 3

```

graph TD
    300 --> 302([START])
    302 --> 304[STORE A FIRST SEQUENCE TO A MEMORY]
    304 --> 306[OPEN A DATABASE OF SEQUENCE FEATURES]
    306 --> 308[READ FIRST FEATURE FROM DATABASE]
    308 --> 310[COMPARE FEATURE ATTRIBUTES WITH THE FIRST SEQUENCE]
    310 --> 316{FOUND?}
    316 -- YES --> 318[DISPLAY FOUND FEATURE TO THE USER]
    316 -- NO --> 310
    318 --> 320{MORE FEATURES IN DATABASE?}
    320 -- YES --> 326[READ NEXT FEATURE IN DATABASE]
    326 --> 310
    320 -- NO --> 324([END])
  
```

**FIGURE 4**

## FIGURE 4

9	18	27	36	45	54
ATG ATA AAC GTT GCA ACG GGA GAG GAG ACC CCA ATA CAC CTC TTT GGA GTC AAC					
Met Ile Asn Val Ala Thr Gly Glu Glu Thr Pro Ile His Leu Phe Gly Val Asn					
63	72	81	90	99	108
TGG TTC GGC TTT GAG ACA CCG AAC TAC GTT GTT CAC GGC CTA TGG AGT AGG AAC					
Trp Phe Gly Phe Glu Thr Pro Asn Tyr Val Val His Gly Leu Trp Ser Arg Asn					
117	126	135	144	153	162
TGG GAG GAC ATG CTC CTC CAG ATC AAG AGC CTT GGC TTC AAT GCG ATA AGG CTT					
Trp Glu Asp Met Leu Leu Gln Ile Lys Ser Leu Gly Phe Asn Ala Ile Arg Leu					
171	180	189	198	207	216
CCC TTC TGT ACC CAG TCA GTA AAA CCG GGG ACG ATG CCA ACG GCG ATT GAC TAC					
Pro Phe Cys Thr Gln Ser Val Lys Pro Gly Thr Met Pro Thr Ala Ile Asp Tyr					
225	234	243	252	261	270
GCC AAG AAC CCA GAC CTC CAG GGT CTT GAC AGC GTC CAG ATA ATG GAG AAA ATA					
Ala Lys Asn Pro Asp Leu Gln Gly Leu Asp Ser Val Gln Ile Met Glu Lys Ile					
279	288	297	306	315	324
ATC AAG AAG GCT GGA GAC CTG GGC ATA TTC GTG CTC CTC GAC TAC CAC AGA ATA					
Ile Lys Lys Ala Gly Asp Leu Gly Ile Phe Val Leu Leu Asp Tyr His Arg Ile					
333	342	351	360	369	378
GGA TGC AAC TTC ATA GAA CCC CTA TGG TAC ACC GAC AGC TTC TCG GAG CAG GAC					
Gly Cys Asn Phe Ile Glu Pro Leu Trp Tyr Thr Asp Ser Phe Ser Glu Gln Asp					
387	396	405	414	423	432
TAC ATA AAC ACC TGG GTT GAA GTC GCC CAG AGG TTC GGC AAG TAC TGG AAC GTT					
Tyr Ile Asn Thr Trp Val Glu Val Ala Gln Arg Phe Gly Lys Tyr Trp Asn Val					
441	450	459	468	477	486
ATC GGC GCG GAC CTG AAG AAC GAA CCC CAC AGC TCA AGC CCC GCA CCT GCC GCC					
Ile Gly Ala Asp Leu Lys Asn Glu Pro His Ser Ser Ser Pro Ala Pro Ala Ala					
495	504	513	522	531	540
TAC ACT GAC GGA AGT GGG GCC ACG TGG GGA ATG GGC AAC AAC GCC ACC GAC TGG					
Tyr Thr Asp Gly Ser Gly Ala Thr Trp Gly Met Gly Asn Asn Ala Thr Asp Trp					
549	558	567	576	585	594
AAC CTG GCG GCT GAG AGG ATA GGA AGG GCA ATT CTG GAG GTT GCC CCA CAA TGG					
Asn Leu Ala Ala Glu Arg Ile Gly Arg Ala Ile Leu Glu Val Ala Pro Gln Trp					
603	612	621	630	639	648
GTT ATA TTT GTT GAG GGA ACC CAG TTC ACC ACC CCC GAG ATA GAC GGT AGG TAC					
Val Ile Phe Val Glu Gly Thr Gln Phe Thr Thr Pro Glu Ile Asp Gly Arg Tyr					
657	666	675	684	693	702
AAG TGG GGC CAC AAC GCC TGG TGG GGC GGA AAC CTT ATG GGT GTT AGG AAG TAC					
Lys Trp Gly His Asn Ala Trp Trp Gly Gly Asn Leu Met Gly Val Arg Lys Tyr					
711	720	729	738	747	756
CCA GTT AAC CTG CCC AGG GAC AAG GTT GTT TAC AGC CCC CAA GTT TAC GGT TCA					
Pro Val Asn Leu Pro Arg Asp Lys Val Val Tyr Ser Pro Gln Val Tyr Gly Ser					
765	774	783	792	801	810
GAA GTT TAC GAC CAG CCC TAC TTT GAC CCC GGT GAG GGG TTC CCC GAC AAC CTC					
Glu Val Tyr Asp Gln Pro Tyr Phe Asp Pro Gly Glu Gly Phe Pro Asp Asn Leu					
819	828	837	846	855	864
CCC GAA ATA TGG TAC CAC CAC TTC GGC TAC GTA AAG CTT GAT CTC GGT TAC CCT					
Pro Glu Ile Trp Tyr His His Phe Gly Tyr Val Lys Leu Asp Leu Gly Tyr Pro					

FIG. 5A

873 882 891 900 909 918  
 GTT GTT ATA GGT GAG TTC GGA GGC AAG TAC GGC CAT GGG GGA GAC CCG AGG GAT  
 Val Val Ile Gly Glu Phe Gly Gly Lys Tyr Gly His Gly Gly Asp Pro Arg Asp

927 936 945 954 963 972  
 GTC ACT TGG CAG AAC AAG ATA ATA GAC TGG ATG ATC CAG AAC AAA TTC TGT GAC  
 Val Thr Trp Gln Asn Lys Ile Ile Asp Trp Met Ile Gln Asn Lys Phe Cys Asp

981 990 999 1008 1017 1026  
 TTC TTC TAC TGG AGC TGG AAC CCA AAC AGC GGT GAC ACC GGT GGA ATT CTG AAG  
 Phe Phe Tyr Trp Ser Trp Asn Pro Asn Ser Gly Asp Thr Gly Gly Ile Leu Lys

1035 1044 1053 1062 1071 1080  
 GAT GAC TGG ACG ACA ATA TGG GAG GAC AAG TAC AAC AAC CTG AAG AGG CTC ATG  
 Asp Asp Trp Thr Thr Ile Trp Glu Asp Lys Tyr Asn Asn Leu Lys Arg Leu Met

1089 1098 1107 1116 1125 1134  
 GAC AGC TGT TCT GGA AAC GCC ACT GCC CCG TCC GTC CCC ACG ACA ACT ACA ACA  
 Asp Ser Cys Ser Gly Asn Ala Thr Ala Pro Ser Val Pro Thr Thr Thr Thr Thr

1143 1152 1161 1170 1179 1188  
 ACA AGC ACA CCG CCA ACG ACC ACA ACG ACT ACA ACA TCC ACT CCA ACG ACC ACT  
 Thr Ser Thr Pro Pro Thr Thr Thr Thr Thr Thr Ser Thr Pro Thr Thr Thr

1197 1206 1215 1224 1233 1242  
 ACC CAG ACC CCG ACC ACC ACT ACT CCA ACT ACG ACA ACC ACC ACG ACC ACA ACT  
 Thr Gln Thr Pro Thr Thr Thr Thr Thr Pro Thr Thr Thr Thr Thr Thr Thr

1251 1260 1269 1278 1287 1296  
 CCT TCA AAT AAC GTC CCA TTT GAA ATT GTG AAC GTT CTC CCG ACT AGC TCC CAG  
 Pro Ser Asn Asn Val Pro Phe Glu Ile Val Asn Val Leu Pro Thr Ser Ser Gln

1305 1314 1323 1332 1341 1350  
 TAC GAG GGA ACC AGC GTG GAG GTT GTA TGT GAT GGA ACC CAG TGT GCC TCC AGC  
 Tyr Glu Gly Thr Ser Val Glu Val Val Cys Asp Gly Thr Gln Cys Ala Ser Ser

1359 1368 1377 1386 1395 1404  
 GTT TGG GGA GCT CCG AAC CTC TGG GGA GTC GTT AAA ATC GGA AAC GCC ACC ATG  
 Val Trp Gly Ala Pro Asn Leu Trp Gly Val Val Lys Ile Gly Asn Ala Thr Met

1413 1422 1431 1440 1449 1458  
 GAC CCC AAC GTT TGG GGC TGG GAG GAC GTT TAC AAG ACT GCA CCC CAG GAC ATT  
 Asp Pro Asn Val Trp Gly Trp Glu Asp Val Tyr Lys Thr Ala Pro Gln Asp Ile

1467 1476 1485 1494 1503 1512  
 GGA ACC GGC AGC ACA AAG ATG GAG ATA AGG AAC GGG GTG CTC AAG GTT ACA AAC  
 Gly Thr Gly Ser Thr Lys Met Glu Ile Arg Asn Gly Val Leu Lys Val Thr Asn

1521 1530 1539 1548 1557 1566  
 CTC TGG AAC ATC AAC ATG CAT CCG AAG TAT AAC ACA ATG GCA TAC CCG GAG GTC  
 Leu Trp Asn Ile Asn Met His Pro Lys Tyr Asn Thr Met Ala Tyr Pro Glu Val

1575 1584 1593 1602 1611 1620  
 ATA TAC GGC GCC AAG CCT TGG GGC AAC CAG CCA ATA AAC GCT CCG AAC TTC GTG  
 Ile Tyr Gly Ala Lys Pro Trp Gly Asn Gln Pro Ile Asn Ala Pro Asn Phe Val

1629 1638 1647 1656  
 CTC CCG ATA AAG GTC TCC CAG CTT CCG AGG ATA CTT CGT TGA  
 Leu Pro Ile Lys Val Ser Gln Leu Pro Arg Ile Leu Arg \*\*\*

FIG. 3B